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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,447	09/29/2003	Nobuyuki Katsuda	0425-1084P	6696
2292	7590	04/03/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			ROSENBERG, LAURA B	
			ART UNIT	PAPER NUMBER
			3616	
DATE MAILED: 04/03/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/671,447	Applicant(s) KATSUDA, NOBUYUKI	
	Examiner Laura B. Rosenberg	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 16-33 and 36-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 34, and 35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 16-33 and 36-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 29 September 2005.

### ***Claim Objections***

2. Claims 1, 7, 8, 11, 12, 14, 15, 34, and 35 are objected to because applicant should avoid the use of variables in the claims. Specifically, "gas flow path sectional area (A)" should be changed to --first gas flow path sectional area--, or something similar. Also, "gas flow path sectional area (B)" should be changed to --second gas flow path sectional area--, or something similar. Appropriate correction is required.
3. Claim 7 is objected to because of the following informality: "a upper lateral part" should be changed to --an upper lateral part-- (claim 7, lines 3-4). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-15, 34, and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

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which applicant regards as the invention. In regards to lines 7-8 of claim 1, it is unclear how many rupturable plates there are and where they are located. As currently claimed, "rupturable plates which closes" is grammatically incorrect, and the examiner is not sure if the applicant intended for it to read "rupturable plate which closes" or "rupturable plates which close". For the purposes of examination, based on the drawings, the examiner will assume that the applicant intended for the claim to be drawn to "rupturable plates" with at least one located in cooperation with each respective end portion or with each gas discharging port.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Forbes et al. (6,062,599). Forbes et al. disclose an inflator (for example, including #10a, and also labeled #200 in the specification; best seen in figure 7) for an air bag (inflatable vehicle occupant protection device, such as an air bag, not shown) comprising:

- A tubular inflator housing (generally labeled #12a; central cylindrical member not labeled in figure 7, but similar to #20 in figure 1) provided at both end portions with opening portions (including left and right end portions where central cylindrical member meets manifolds #30a)

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- Diffuser portions (including #30a) mounted at both end portions and provided with a gas discharging port (including #76a) able to discharge pressurized medium (including #16a) flowing out from the opening portions into the air bag
- Rupturable plates (including #80a) which close both opening portions (best seen in figure 7)
- Igniters (including #110a) provided to rupture each of the rupturable plates
- Narrow paths (for example, formed by a plurality of exit ports #76a at each end portion) able to regulate respective flow amounts of the pressurized medium are provided at both end portions of the inflator housing (best seen in figures 4, 5, 7)
- A first gas flow path section area of one of the narrow paths and a second gas flow path sectional area of the other of the narrow paths are different from each other (for example, by making exit ports different diameters, thus creating a different opening area; column 6, lines 29-36)

8. Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Marchant (5,564,743). Marchant discloses an inflator (for example, including #20) for an air bag (not shown) comprising:

- A tubular inflator housing (including #22) provided at both end portions (for example, one end portion extends to the left from the partition plate and the other end portion extends to the right from the partition plate) with opening portions (including opening portions closed by #26, 28)

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- Diffuser portions (for example, walls including #30a, 32a) mounted at both end portions and provided with a gas discharging port (including #30a, 32a) able to discharge pressurized medium flowing out from the opening portions into the air bag
- Rupturable plates (including sealing sheets #36) which close both sets of gas discharging ports
- Igniters (including #44, 52) provided to rupture each of the rupturable plates (for example, by generating gas from the generant pellets, which causes the sealing sheets to rupture)
- Narrow paths (for example, formed by a plurality of exit ports #30a, 32a at respective end portions) able to regulate respective flow amounts of the pressurized medium are provided at both end portions of the inflator housing (best seen in figures 1, 2)
- A first gas flow path section area of one of the narrow paths and a second gas flow path sectional area of the other of the narrow paths are different from each other (for example, by having a different number of exit ports, thus a different opening area, associated with a different amount of gas generant in each gas chamber; including column 4, lines 4-10)
- A partition plate (including internal wall structure #34) extending in a diametrical direction and disposed in the interior of the inflator housing (best seen in figures 1, 2)
- A hole portion (including central opening #60a in backing ring #60) provided in the partition plate and having a flow path sectional area of a gas which is smaller than the gas flow path sectional area of narrower of the narrow paths (though drawings are not necessarily drawn to scale, figures 1-3 show gas flow sectional area of gas

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flow path C being smaller than that of gas flow path A; further, chamber size, and thus flow path sectional area of exit ports can be adjusted as desired; further, central opening #60a has a "relatively small diameter", per column 4, lines 45-46)

- A closing member (for example, including burst disk #62) that closes the hole portion and is attached to a side in which the larger of the narrow paths is provided (best seen in figure 1; column 4)

### ***Allowable Subject Matter***

9. Claims 4, 7-15, 34, and 35 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blumenthal and Dinsdale et al. each disclose an inflator for an air bag comprising a tubular inflator housing, diffuser portions, gas discharging ports, rupturable plates, igniters, and narrow paths for regulating respective flow amounts at both ends of the inflator housing.

Siddiqui et al. disclose an inflator for an air bag comprising a tubular inflator housing, diffuser portions, gas discharging ports, igniters, and narrow paths for regulating respective flow amounts at both ends of the inflator housing.

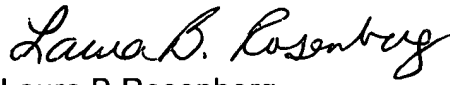
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Sutherland discloses connected inflators for an airbag module, each inflator directing inflation gas into a respective airbag of the module.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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Patent Examiner  
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LBR

 3/27/06  
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